



Joint Mission Planning System

Interoperability Certification

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**Joint Interoperability Test Command
Fort Huachuca, Arizona**



- **JITC's Mission**
- **DOD Directives**
- **Joint Interoperability Certification**
- **JITC's Support to JMPS**



JITC

Specific & Unique Roles

- ☐ **Sole C4I Interoperability Certifier**
- ☐ **Operational Test Agency for many DoD Elements**
- ☐ **Executive Agent for Testing (NIMA, NSA, CDL, DCGS)**





JITC Testing

- ❑ **Criteria for Measuring Success**
 - MNS, ORD, TEMP, C4ISP
 - Characterize & Certify
 - Ensure Operational Capability
 - **Test for Success**
- ❑ **JITC's Follow-on Program**
 - Validate & Verify Certifications
 - Capture Systems that Escaped Acquisition Cycle



Affordable Confidence



Joint Interoperability Directives

DODD 4630.5

Forces must have interoperable NSS and ITS.

DODD 5105.19

DISA shall ensure end-to-end interoperability.

CJCSI 6212.01B

JITC is the sole NSS and ITS joint interoperability certifier.

JCS Pub 1-

⁰²
Interoperability is the ability of systems, units, or forces to provide services to and accept services from other systems, units or forces, and to use the services so exchanged to enable them to operate effectively together.

CJCSI 3170.01B

Mandates interoperability KPP for CRDs and ORDs.

DODI 4630.8

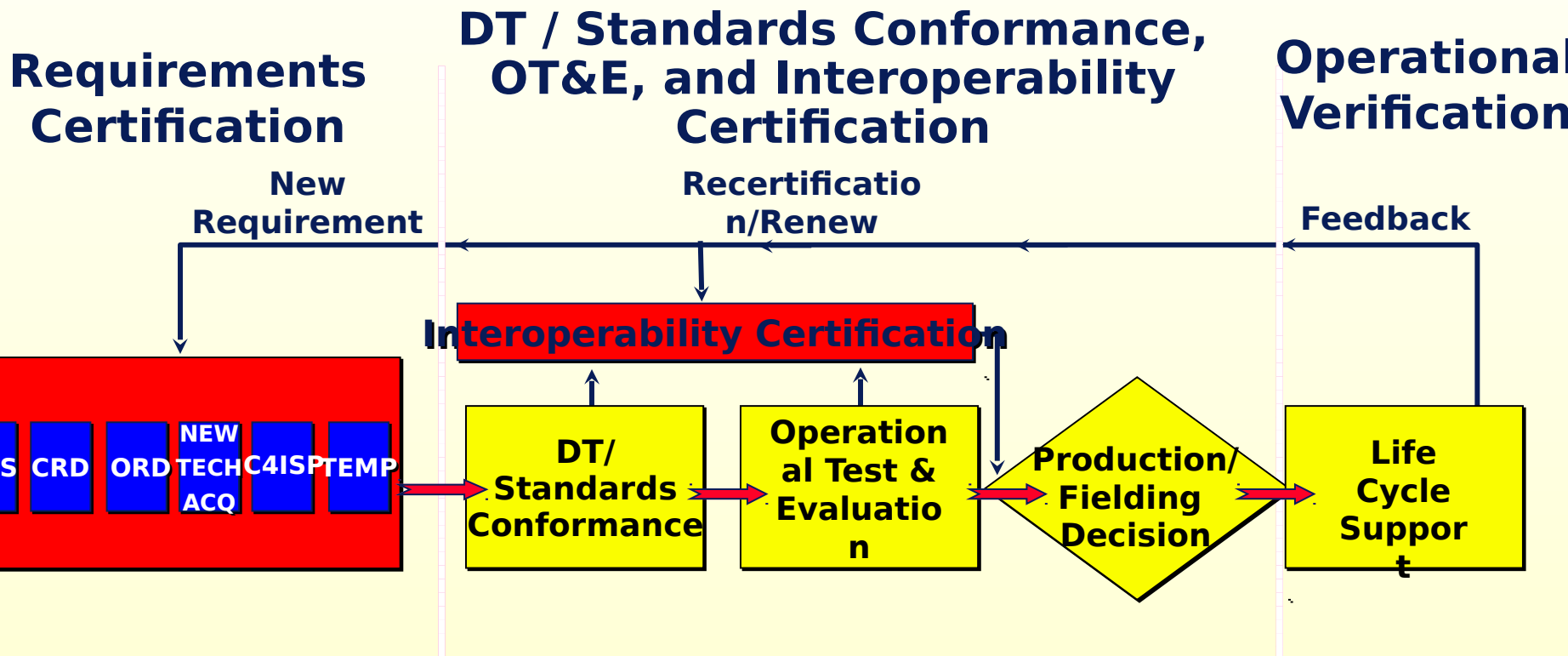
All NSS and ITS are for joint use and shall be certified by DISA in the acquisition process.

DOD Regulation 5000.2-R

JITC shall certify that NSS and ITS meet applicable requirements for interoperability and supportability.



System Life-Cycle Certification Process



“Interoperability must be a life-cycle commitment.”

Lieutenant General John L. Woodward, Jr., former Director, Command, Control, Communications and Computer Systems Directorate (J-6), Joint Staff



Interoperability Certification

- **Participate Throughout Life-Cycle**
- **Identify & Leverage Planned Test Events**
- **For Each System:**
 - **Gather & Evaluate Requirements**
 - **Determine Test Criteria**
 - **Determine Type of Certification**
 - **Develop Interoperability Matrix**
 - **Coordinate Interoperability Test w/Test Manager**
 - **Assess Interoperability Results, Operational Impact w/User**
 - **Issue Interoperability Certification Letter (ERD)**
 - **Publish Interoperability Certification Report (ERD)**



JMPS Interoperability Certification Testing

- **Perform Interoperability Certification to Mitigate Risk**
- **Observe Navy Tests & Share Data**
 - Review Navy Test Plan, Suggest Tests, Decide Events to Observe
- **Certification Standard derived f/ JMPS-M ORD Interoperability KPP**
 - **Threshold: 100% of All Critical IERs**
 - **Objective: 100% of All IERs**



JMPS V1 Interoperability Test

- **Focus on Exchange of Data over Interfaces**
 - IAW ORD IER Matrix
 - Demonstrate End-to-End Operational Effectiveness
- **Assess Data Transfer:**
 - (1) Timeliness: Received in sufficient time for system operators to perform mission-tasks
 - (2) Accuracy: Sufficiently accurate for operators to perform mission-tasks
 - (3) Reliability: Sufficiently reliable for operators to perform mission-tasks
 - (4) Usability: Correctly formatted & sufficiently complete to allow automated message processors & operators to perform mission-tasks
- **Following Data Analysis, JITC Will Issue Joint Interoperability Readiness Statement**



JMPS IERs (Sample)

- Based on Draft JMPS-M ORD, dated April 30, 2002

Event/Action	Info Characterization	Send Node	Receive Node	Critical?	Format	Timeliness
Direct & Lead	C2 Mission Task	Component CMDR	JMPS-M	No	Text, Data	≤ 2 hr / 10 min
Direct & Lead	C2 Mission Task	JMPS-M	Op Platform JMPS-M	No	Data	≤ 5 min / 1 min
Obtain & Access Intel	Threat OB	JIC, Local CMDR	JMPS-M	No	Data	≤ 30 min / 5min
Obtain & Access Intel	Threat-Mission Objective Intel (e.g. Characteristics & Performance)	JIC, Local CMDR	JMPS-M	No	Data	≤ 10 min
Engage Tgts - MPS Query IAW JSOW Unitary/SLAM mission task	Mission Objective Imagery	Local CMDR	JMPS-M	Yes - (critical for JSOW unitary or Yes SLAM)	Imagery	≤ 10 min
Engage Targets	Weapon System Data Loads (Does not include Theater	JMPS-M	Mission Planner		Data	≤ 6 min / 1min



Information Clarification

- **Interfaces Actually Participating in Certification & System-of-Systems Tests**
 - **IERs that can be Observed/Evaluated**
- **Data Format Requirements in IERs**
- **Reconsider Criticality of IERs**
 - **Direct & Lead**
 - **Threat**
 - **Target Imagery**



Interoperability Testing Summary

- **All NSS & ITS Must Be Certified by DISA/JITC as Interoperable**
- **Interoperability Must Be Certified at Each Milestone**
- **Early Involvement Reduces Risk, Cost & Duplication of Effort**
- **Test for Success**



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